

SLAB THICKNESS TABLE	€ BRGS.	¼ PT.	MIDSPAN	¾ PT.	€ BRGS.
(A) REQ'D TOP OF SLAB ELEVATION					
® TOP OF BEAM EL. (FIELD MEASURE)					
© = (A) - (B)					
① SLAB AND S.D.L. DEFLECTION					
⊕ ACTUAL SLAB THICKNESS =					

\* (F) IS THE THEORETICAL THICKNESS OF THE DECK SLAB BASED ON ASSUMED BEAM CAMBER. IT IS SHOWN TO ASSIST IN ESTIMATING THE MINIMUM SLAB THICKNESS AS WELL AS CONCRETE VOLUME.

ALL MEASUREMENTS ARE TAKEN AT CENTERLINE OF BEAM.

CAMBER TABLE (MID-S	SPAN)	
CAMBER DUE TO PRESTRESSED FORCE AND BEAM DEADLOAD AT TRANSFER	ł	
CAMBER DUE TO PRESTRESSED FORCE AND BEAM DEADLOAD WITH GROWTH **	<b>†</b>	
DEFLECTION DUE TO SLAB DEAD LOAD	<b>†</b>	
DEFLECTION DUE TO SUPERIMPOSED DEAD LOAD	+	

\*\* CAMBER GROWTH IS ASSUMED TO BE 75% OF THE CAMBER AT TRANSFER.

	DESIGN LOAD TABLE					
	UNIT	REACTION AT ABUTMENT (kips)	MAX. MOM. MIDSPAN (KIP-ft.)			
	BEAM					
D.L.	SLAB					
o.	UTILITIES					
	SIDEWALK					
S.D.L.	RAILING/BARRIER					
S.L	FUTURE W.S.					
	HL-93					
Ŀ	NYSDOT P.V.					

ASSUMED LIVE LOAD = HL-93 AND NYSDOT PERMIT VEHICLE FOR LRFD (HS 25 FOR LFD)

## DRIP GROOVE DETAIL AT FASCIA

NOTE: A DRIP GROOVE SHALL BE PROVIDED ON FASCIA BEAMS.

END DRIP GROOVES 3'-0" FROM FACE OF ABUTMENT WITH A 90° TURN TOWARD FASCIA THAT INTERSECTS THE CHAMFER.

TYPE F NEXT BEAM - PROPERTIES							
BEAM TYPE	BEAM Flange Width (Inches)	BEAM DEPTH (INCHES)	BEAM STEM WIDTH (INCHES)	AREA (IN²)	I (IN <sup>4</sup> )	Yb (INCHES)	WEIGHT (PLF)
	A	В	С				
8' WIDTH BEAMS							
NEXT 36 F	95.50	36.00	13.00	1287	160240	21.77	1341
NEXT 32 F	95.50	32.00	13.25	1182	115813	19.51	1231
NEXT 28 F	95.50	28.00	13.50	1075	79901	17.24	1120
NEXT 24 F	95.50	24.00	13.75	966	51823	14.95	1006
12' WIDTH BEAMS							
NEXT 36 F	143.50	36.00	13.00	1479	185525	23.36	1541
NEXT 32 F	143.50	32.00	13.25	1374	134258	20.98	1431
NEXT 28 F	143.50	28.00	13.50	1267	92661	18.57	1320
NEXT 24 F	143.50	24.00	13.75	1158	60045	16.12	1206

## DESIGNER NOTES:

VARIATION IN FLANGE WIDTH BETWEEN THE DIMENSIONS SHOWN IS ALLOWED. BEAMS WITH FLANGE WIDTHS OUTSIDE OF THE RANGE SHOWN; IF APPROVED BY THE DEPUTY CHIEF ENGINEER (STRUCTURES), WILL REQUIRE A SPECIAL DESIGN.

THE STEM WIDTH AND SPACING ARE FIXED.

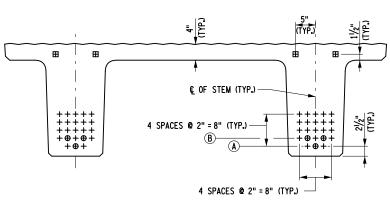
THE ACUTE CORNERS OF THE FLANGE OVERHANGS SHOULD BE CHAMFERED 6"x6" IN ORDER TO MINIMIZE CASTING AND HANDLING DAMAGE.

DECK SLAB OVERHANG MUST BE DESIGNED TO HANDLE STANDARD IMPACT LOADS.

CONSULT THE BRIDGE MANUAL FOR DEBONDING CRITERIA.

THE STRANDS LABELED BE SHALL BE TENSIONED TO 2.2 kips. THESE STRANDS OR ADDITIONAL STRANDS WITHIN THE TOP FLANGE MAY BE TENSIONED TO FULL PRETENSIONING IF REQUIRED BY DESIGN.

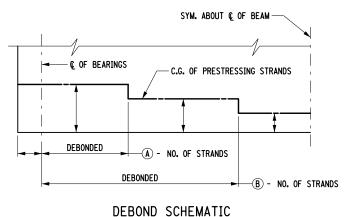
BEAM OVERHANG PAST & BEARINGS = BEARING LENGTH + 1"



## **LEGEND**

TYPICAL STRAND LOCATIONS

- + DENOTES STRAIGHT BONDED STRAND
- ⊕ DENOTES STRAIGHT DEBONDED STRAND
- **⊞** DENOTES STRANDS TENSIONED TO 2.2 kips



ALL PRESTRESSING STRANDS SHALL BE 0.6" DIAMETER, LOW RELAXATION STEEL WITH A GUARANTEED ULTIMATE STRENGTH OF 270 ksi.

JACKING FORCE = 43.9 kips PER STRAND.

REQUIRED MINIMUM CONCRETE STRENGTH AT TRANSFER = 7 ksi.

REQUIRED MINIMUM CONCRETE STRENGTH AT 56 DAYS = 10 ksi.

ALLOWBLE TENSION IN THE PRESTRESSED CONCRETE UNITS:

AT TRANSFER = ksi.

AT SERVICE LIMIT STATE = ksi (HL-93)

AT SERVICE LIMIT STATE = ksi (NYSDOT PERMIT VEHICLE)

ALL BEAMS SHALL HAVE AN EXPOSED AGGREGATE FINISH ON ANY SURFACE THAT WILL BE IN CONTACT WITH THE CLOSURE POUR CONCRETE USED IN LONGITUDINAL JOINTS AND BACKWALLS.

PRESTRESSING STRANDS CUT FLUSH WITH THE END OF THE BEAM OR EXTENDED FOR INTEGERAL ABUTMENT APPLICATIONS SHALL BE PROTECTED AGAINST CORROSION BY THE APPLICATION OF ZINC PAINT IN ACCORDANCE WITH THE "REPAIR" PORTION OF THE NYS STANDARD SPECIFICATION SECTION 719.01. THE COST OF COATING THE STRANDS SHALL BE INCLUDED IN THE PRICE BID FOR THE BEAM ITEM.

THE TOPS OF PRESTRESSED UNITS SHALL RECEIVE A TRANSVERSE ROUGHENED FINISH WITH AN AMPLITUDE OF  $\frac{1}{4}$  in.

